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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8, MONTANA OFFICE
FEDERAL BUILDING, 301 S. PARK, DRAWER 10096
HELENA, MONTANA 59626-0096

Ref: 8MO

January 25, 1999

Mr. Thomas J. Clifford, Forest Supervisor
Helena National Forest
2880 Skyway Drive
Helena, MT 59601

and

Mr. Merle Good, Butte Field Manager
Butte Field Office
P.O. Box 3388
Butte, MT 59702



Re: Clancy-Unionville Vegetation Manipulation and
Travel Management Project Draft Environmental
Impact Statement

Dear Mr. Clifford and Mr. Good:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the Environmental Protection Agency, Region VIII, Montana Office (EPA) reviewed the above-referenced Draft Environmental Impact Statement (DEIS).

The EPA is supportive of the purpose of the proposed Clancy-Unionville Vegetation Manipulation and Travel Management project to improve the condition of forest and grassland vegetation in the Clancy-Unionville project area. The EPA considers Alternative D to be the environmentally preferable alternative due to its emphasis upon closing and rehabilitating roads in riparian areas (which would provide a greater level of water quality improvement and fisheries enhancement), and its emphasis upon restricting motorized vehicle use for the benefit of wildlife. We note, however, that Alternative A would appear to better address the project purpose and need to restore desired vegetative conditions and reduce the risk of potential catastrophic wildfire. Alternative C would provide greater recreational access and perhaps better control of noxious weeds.

*EPA expressed env. concerns about adverse impacts to
water & air quality, fisheries, wildlife habitat.*



The EPA recognizes that such resource trade-offs are involved in land management decisions. We suggest that the Forest Service and BLM carefully review and evaluate the rationale for selecting treatment methods and units and road management options, and consider constructing a modified preferred alternative by choosing treatment methods and units and road management options from among the present action alternatives. The EPA believes that it may be possible to construct a modified preferred alternative to better optimize the ability of the preferred alternative to address both project purpose and need and the significant issues (i.e., recreation, wildlife, air and water quality, noxious weeds, fuel loading and wildfire risk).

We also believe that it would be desirable to treat as many acres as possible to restore more desired vegetative conditions and reduce risk of wildfire, while also implementing fish and watershed rehabilitation projects (i.e., road obliteration and revegetation), preventing spread of noxious weeds, and protecting wildlife security and habitat with a restrictive motorized vehicle access policy. We suggest that a new modified alternative be constructed that would integrate desirable features from the present action alternatives. Desirable features we consider worthy of including in a modified preferred alternative include:

- ☛ maximize fish and watershed improvement (i.e., road obliteration and revegetation);
- ☛ treat as many acres as possible to restore desired vegetative conditions and reduce fuel loadings in high fire risk areas while protecting other resource values (e.g., wildlife habitat and security, air and water quality, control of noxious weeds);
- ☛ restrict motorized vehicle access adequately to protect wildlife and wildlife habitat and watersheds while allowing reasonable public access.

We also believe that inclusion or discussion of the rationale for individual treatment units with such additional alternative evaluations in the FEIS would better explain to the public the resource trade-offs involved in making land management decisions, and may lead to improved public acceptance of decisions. We note of course that the Forest Service will need to evaluate and analyze the impacts (e.g., water yield, sediment production, air quality modeling, wildlife effects) of any new modified alternative, and display those impacts in the FEIS.

While the EPA is supportive of the need to improve the condition of forest and grassland vegetation and to reduce the risk of wildfire, we are concerned about potential adverse impacts to water and air quality that may occur from vegetation treatments. We recommend that trade-offs of vegetative treatments/wildfire risk reduction vs. short term direct water and air quality and wildlife impacts from treatment units and road management be discussed more fully in the FEIS. We also recommend expanded monitoring programs to allow detection and identification of water and air quality impacts that do occur so that they may be better mitigated.

We note that the Montana Department of Environmental Quality should be contacted to assure that potential impacts of proposed actions upon the State designated "water quality limited

streams" of Lump Gulch Creek and Clancy Creek will be compatible with the State's development of Total Maximum Daily Loads (TMDLs) for these streams.

In regard to proposed prescribed burning, the DEIS indicates that air quality standards would be met with all alternatives, however, it was not clear if air quality modeling conducted to evaluate compliance with air quality standards included combined background concentrations of PM_{10} with the PM_{10} produced by prescribed fires. This should be clarified in the FEIS. The EPA also recommends that quantitative emissions for PM_{10} (tons/yr) be listed for each alternative. Such information is lacking in the DEIS, and its inclusion in the FEIS would give the public and the decision-maker a more distinct comparison of PM_{10} emissions for each alternative.

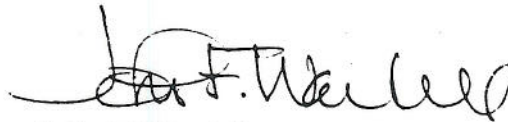
Finally, the EPA supports proposed road access restrictions to increase wildlife security. We note, however, that with the advent of all terrain vehicles (ATVs) and off-road vehicles (ORVs) it is difficult to effectively restrict motorized access to public lands with simple road closures. An effective policing and enforcement program is needed to assure that motorized access does not occur in restricted areas. The FEIS should describe the Forest Service and BLM inspection and enforcement program that will be used to assure that ATVs and ORVs will not violate motorized vehicle access limitations.

The EPA's more detailed discussion of alternatives and our other questions and/or comments regarding the analysis, documentation, or potential environmental impacts of the Clancy-Unionville Vegetation Manipulation and Travel Management Project are included in the enclosure with this letter.

Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action and alternatives in an EIS, the Clancy-Unionville Vegetation Manipulation and Travel Management Project DEIS has been rated as Category EC-2 (Environmental Concerns - Insufficient Information). A copy of EPA's rating criteria is attached.

The EPA appreciates the effort that went into the preparation of this DEIS, and we thank you for the opportunity for review and comment. If we may provide further explanation of our concerns please contact Mr. Steve Potts of my staff in Helena at (406) 441-1140 ext. 232.

Sincerely,



John F. Wardell
Director
Montana Office

Enclosure

cc: Cynthia Cody/Virginia Rose, EPA, 8EPR-EP, Denver
Ann Puffer, Forest Service-Region 1, RAWF, Missoula
Stuart Lehman, MDEQ-Resource Protection & Planning Bureau, Helena
Cliff Walker, Forest Service-Region 1, TCFPM, Missoula
Dan Mainwaring, Helena Ranger District, Helena
Mike Small, Butte Field Office, BLM, Butte

EPA Comments on the Draft Environmental Impact Statement for the Clancy-Unionville Vegetation Manipulation and Travel Management Project

Brief Project Overview:

The Helena Ranger District of the Helena National Forest and the Butte Field Office of the Bureau of Land Management (BLM) have prepared the Clancy-Unionville Vegetation Manipulation and Travel Management Project DEIS to evaluate alternative vegetative treatments and travel management in the 60,101 acre Clancy-Unionville area, which includes 5,358 acres of BLM lands. Approximately 83% of the project area is in Forest Service/BLM ownership. The purpose of the project is to move the area towards desired conditions for forest and grassland vegetation.

Three action alternatives, Alternatives A, C, and D, and no action, Alternative B, have been evaluated. The proposed action, Alternative A, involves the following activities on Forest Service land: 4,870 acres of prescribed burning (3,126 acres fuels reduction, including 910 acres of grassland, 1,461 acres of savannah, and 755 acres of forest underburning; and 1,744 acres of site preparation); timber harvesting (820 acres commercial thinning, 789 acres shelterwood cuts, 205 acres clearcuts, 124 acres seedtree cuts, 98 acres of aspen treatments); road building (15 miles of new temporary roads); and travel management that would close a number of existing roads. An amount of 0.5 miles of existing roads would be rehabilitated by obliteration and revegetation to improve watershed and fisheries. On BLM land Alternative A would involve: 690 acres of ponderosa pine selection harvest and 250 acres of prescribed burning; 2.4 miles of new temporary road, and travel management involving closing 5,610 acres of BLM land year-long.

Alternative B, no action, would leave the project area in its current condition. All BLM lands, roads, and trails would remain open year long to motorized travel with the exception of Davis Gulch, and snowmobiles open area wide during winter.

Alternative C was developed to respond to air quality and noxious weed issues. This alternative would reduce the numbers of acres burned and substitute 850 acres of mechanical treatment rather than prescribed burning to reduce fuel accumulations. Alternative C involves the following activities on Forest Service land: prescribed burning (1,934 acres of fuels reduction, including 888 acres of grassland, 704 acres of savannah, and 342 acres of forest underburning); timber harvesting (1,742 acres commercial thinning, 106 acres shelterwood cuts, 19 acres clearcuts); road building (5 miles of new temporary roads); and travel management would increase the total miles of open road in the summer/winter by 7 miles and decrease open roads by 6 miles compared to the existing situation. An amount of 11 miles of existing roads would be rehabilitated by obliteration and revegetation to improve watershed and fisheries. On BLM land Alternative C would involve the same features as Alternative A except that meadow enhancement would be accomplished mechanically; slash treatment after timber harvest would be done mechanically and no broadcast burning would be carried out, and travel management involving closing 5,610 acres of BLM land year-long.

Alternative D was developed in response to wildlife concerns. This alternative emphasizes big game security and winter range. Alternative D involves the following activities on Forest Service land: prescribed burning (2,342 acres of fuel reduction including 1,306 acres of grassland, 704 acres of savannah, mechanical treatment of 820 acres of savannah, and 332 acres of forest underburning); timber harvesting (534 acres commercial thinning, 443 acres shelterwood cuts, 109 acres of selection cuts, 135 acres of seedtree harvest, and 65 acres of aspen treatments); road building (9 miles of new temporary roads); and travel management would be more restrictive than Alternatives A, B, and C. An amount of 43 miles of existing roads would be rehabilitated by obliteration and revegetation to improve watershed and fisheries. On BLM land Alternative C would involve the same features as Alternative A except that meadow enhancement would be accomplished mechanically; slash treatment after timber harvest would be done mechanically and no broadcast burning would be carried out, and travel management involving closing 5,610 acres year-long.

Comments

1. It appears to EPA that Alternative D would be the environmentally preferred alternative due to its emphasis upon closing and rehabilitating roads in riparian areas (which would provide a greater level of water quality improvement and fisheries enhancement), and its emphasis upon restricting motorized vehicle use for the benefit of wildlife. We note, however, that Alternative A would appear, to better address the purpose and need to restore desired vegetative conditions and would also reduce the risk of potential catastrophic wildfire to a greater extent. Alternative C would provide greater recreational access, and perhaps, better address the noxious weed issue.

The EPA recognizes that such resource trade-offs are involved in land management decisions. We suggest that it may be possible to construct a modified preferred alternative by selecting treatment units/methods and road management options from among the current alternatives to better optimize the ability of the preferred alternative to address both project purpose and need (i.e., attaining desired future vegetative condition) and the significant issues (recreation, wildlife, noxious weeds, air and water quality, wildfire risk).

We suggest that the Forest Service further evaluate the individual treatment methods/units and consider constructing a modified preferred alternative by picking and choosing treatment units and road management from among the present action alternatives. This may allow an optimal alternative from a resource and environmental perspective to be found that may better address project purpose and need and the significant issues. Other combinations of treatment units and road management may be available that better address the vegetation, watershed, wildlife, noxious weed, and recreation issues and better optimize the resource trade-offs involved. **Inclusion or discussion of such additional alternative evaluation in the FEIS would also better explain to the public the trade-offs involved in making land management decisions, and may lead to improved public acceptance of decisions.**

We note of course that the Forest Service will need to evaluate and analyze the impacts (e.g., water yield, sediment production, air quality modeling) of any new modified alternative, and display those impacts in the FEIS.

2. It is difficult for the reader of the DEIS to ascertain specific reasons for inclusion of some units in one alternative but not another. We believe it would be helpful to include additional discussion of the rationale for selection of particular treatment methods/units and road management decisions for the alternatives. This would improve public understanding of the proposed project, and better achieve the public disclosure purpose of the EIS. Also, it is difficult for the reader of the DEIS to suggest a modified or new alternative since explanation of the rationale for inclusion of specific units in individual alternatives was not provided in the DEIS. We believe more meaningful suggestions for selecting treatment units among the existing alternatives to reconstruct a new or modified alternative may be forthcoming to the Forest Service if rationale for selection of the treatment units for the alternatives were provided. Perhaps a table could be included in the Appendix of the FEIS to identify treatment units and their rationale for each alternative.

3. From a water quality perspective it would appear that Alternatives C and D are preferable to Alternative A as a result of the greater level of sediment reduction expected from Alternatives C and D (Tables 3-23, 3-24, 2-35, 3-26. pages III-94, III-95), including reduced water yield increase in the water quality limited stream, Lump Gulch Creek. The EPA strongly supports the fishery/watershed improvement projects, particularly rehabilitating 43 miles of existing roads in Alternative D. It was not clear from the information presented in the DEIS, however, if a greater level of vegetative treatment and wildfire risk reduction with Alternative A (with the greater numbers of acres treated) could be integrated with the fish/watershed rehabilitation features (i.e., road obliteration and revegetation) and restrictive road management features of Alternative D.

We believe that it would be desirable to treat as many acres as possible to restore desired vegetative conditions and reduce risk of wildfire, while also implementing fish and watershed rehabilitation projects (i.e., road obliteration and revegetation), preventing spread of noxious weeds, and protecting wildlife security and habitat with a restrictive motorized vehicle access policy. Can a new modified alternative be constructed that would integrate such desirable features from the existing action alternatives?

Desirable features we consider worthy of including in a modified preferred alternative include:

- ☛ maximize fish and watershed improvement (i.e., road obliteration and revegetation);
- ☛ treat as many acres as possible to restore desired vegetative conditions and reduce fuel loadings in high fire risk areas while protecting other resource values (e.g., wildlife habitat and security, air and water quality, control of noxious weeds);

restrict motorized vehicle access adequately to protect wildlife and wildlife habitat and watersheds while allowing reasonable public access.

4. We do not object to the Forest Service/BLM desire to reduce the risk of wildfire in forest areas that have nearby home developments. We believe that judicious use of prescribed fire may provide the best overall resource protection scenario (e.g., low intensity fire in specific planned locations spread out over time so that some vegetative cover could become reestablished before runoff). We support such judicious use of underburning where it can be carried out with minimal risk to fisheries, wildlife habitat, and noxious weed spread and air quality impacts. Site-specific evaluation of underburning risks should be incorporated into the modified preferred alternative. It would appear that a well planned and managed underburning program could be accommodated without unduly impacting other resources.

In the discussion of Alternative C on page III-27 it is stated that prescribed burns, intended to reduce fuel accumulations, provide risks to home developments because there is a risk that prescribed burns may expand into wildfires. We would expect that the Forest Service/BLM would take every precaution to avoid the escape of prescribed burns. While prescribed burning is stated (page III-27) to be more effective at restoring forest vegetative health than mechanical treatments, and in general we concur with the use of prescribed burning to help achieve forest health, we agree that it may be appropriate to use mechanical treatments in lieu of prescribed burns to address fuel accumulation in areas where the risk of the escape of prescribed burns is high and nearby home developments may be threatened.

5. We also concur with the need in Alternative C stated on page III-41 to avoid prescribed burning in areas where such burns would have the potential to stimulate Dalmatian toadflax or leafy spurge growth or destroy insects planted for biological weed control. We suggest that these considerations be evaluated for each individual burn unit.

6. We also note that in high risk fire areas it may be preferable to accept a higher level of short term water quality impact from vegetation treatments now, than to suffer through potentially more catastrophic sedimentation and air quality impacts from a wildfire in the future. We recommend that these trade-offs of vegetative treatments/wildfire risk reduction vs. short term direct water and air quality and wildlife impacts from treatment units and road management be discussed more fully in the FEIS. Perhaps this could be done in association with the evaluation of new or modified alternative.

7. We note that Clancy Creek and Lump Gulch Creek are listed as a water quality limited streams (WQLSs) by the Montana Department of Environmental Quality (MDEQ). These listed streams will need development of Total Maximum Daily Loads (TMDL). The TMDL process identifies the maximum load of a pollutant (e.g., sediment, nutrient, metal) a waterbody is able to assimilate and fully support its designated uses; allocates portions of the maximum load to all sources; identifies the necessary controls that may be implemented voluntarily or through regulatory means; and describes a monitoring plan and associated corrective feedback loop to

insure that uses are fully supported.

We recommend that the Forest Service contact the Montana Department of Environmental Quality (i.e., Stuart Lehman at 444-5319 in Helena) to ensure MDEQ concurrence on, and coordination of, proposed activities in the Clancy Creek and Lump Gulch Creek drainages with the MDEQ's TMDL requirements. The projected increase of 3.3% in water yield in Lump Gulch with Alternative A should be concurred upon by the MDEQ's TMDL staff. We recognize that Forest Service/BLM land in these drainages (particularly Clancy Creek) comprises only a portion of the watershed of the WQLS segments, and that the TMDLs will need to consider pollutant loads and management on all land ownerships. We also suggest that water quality monitoring to determine project impacts upon Lump Gulch Creek be incorporated into the aquatics/hydrologic monitoring program.

We also note that Clancy Creek is not identified on Figure 3-1. We recommend that Clancy Creek be identified on Figure 3-1 so that the public can identify where this WQLS is located.

8. It is stated (page III-87) that a high risk of culvert failure exists due to undersized culverts on many Forest Service roads, but that there are no immediate plans to replace these culverts except in Kady Gulch. Table 3-22 identifies culvert sizing and fish passage problems. We encourage the Forest Service to include replacement of undersized culverts and adjustment of fish barrier culverts in the proposed road sediment mitigation package.
9. We are pleased that wet areas, streamside management zones and wetlands in harvest units are identified and BMPs described for their protection (page III-9). Will riparian habitat conservation areas (RHCAs) and buffer zones be established between all harvest and burn units and streams? We encourage the Forest Service to delineate and mark the RHCAs and perennial seeps and springs and wetlands on maps and on the ground before harvesting so that timber contractors will be able to avoid them.
10. Will any harvest or burn units or roads be located on sensitive (erosive) soils? We encourage avoidance of such areas or at least special precautions such as harvest during winter on snow for areas with erosive soils.
11. We are also pleased that the action alternatives would close ½ mile of existing road in the Brooklyn Bridge area to reduce erosion and sedimentation from this road (page III-11).
12. It is stated on page III-92 that only ½ mile of new temporary road is planned to access timber harvest units for Alternative C, in contrast to the 15 miles proposed for Alternative A. This ½ mile road construction for Alternative C, however, appears to be contradicted in Table 2-5 (page II-27) which shows 5 miles of temporary road construction for Alternative C. This discrepancy should be corrected. The amount of road construction for each alternative should be clearly and incontrovertibly stated.

13. It is stated on page III-26 that a total of 4,870 acres will be burned with the proposed action (including 3,126 acres of fuels reduction and 1,744 acres of site preparation). The similar total acreage burned with the other action alternatives (i.e., Alternatives C and D), however, is not clearly disclosed to provide comparative evaluation of alternatives. It would be helpful if similar "total acres burned" figures including acres burned for site preparation were clearly disclosed for Alternatives C and D to allow clear comparison with Alternative A. Burn acreage are shown in Table 2-5 (i.e., Alternative C and D have 1,934 acres and 2,342 acres burned for fuels reduction, respectively), however, it is not clear how much many acres would be burned for site preparation in Alternatives C and D, to compare with the 1,744 acres burned in Alternative A.

14. Table 2-7 - Comparison of Effects by Alternative, page II-32, Air Quality (Short term/prescribed fire meets state standards). According to the table, each alternative (Alternative A through D) meets the state standards. Does this statement also apply when background concentrations of PM_{10} are combined with modeled results? We recommend that quantitative emissions for PM_{10} (tons/yr) be listed for each alternative. This information will give the public and the decision-maker a more distinct comparison of PM_{10} emissions for each alternative.

15. Page III-31, Affected Environment. For wind dispersion, please provide a windrose representative of the Helena area. This information will be of interest to persons with private holdings in the area.

16. Page III-33, Environmental Consequences. We recommend that this section discuss the Montana Air Quality Bureau requirements for prescribed burning. These requirements would most likely present methods for mitigating air quality impacts due to prescribed burning.

17. For slash burning which may smolder longer than one day, will there be any requirement to limit its proximity to residences since evening meteorological conditions may concentrate pollutants near the ground-level?

18. We believe monitoring of activities will be beneficial to improving understanding of impacts upon air quality. We encourage you to develop a monitoring plan to help you establish a quantitative and qualitative understanding of the impacts to air quality. Such a monitoring plan would also help to validate quantitative predictions for future activities. Careful scheduling of the many burning activities to coincide with proper climatological and meteorological conditions will be necessary to avoid air quality problems.

19. The EPA also believes that water quality/aquatics monitoring is a necessary and crucial element in identifying and understanding the consequences of one's actions, and should be an integral part of any management decision. We believe a monitoring plan should be identified in the NEPA documents.

We are pleased to see the DEIS indicate (Appendix B) that some stream morphological monitoring would take place, however, specific information on proposed water quality/aquatics monitoring was not provided. Where would the two stream cross sections to measure morphological features (width, depth, bank stability, particle size distribution, pools, woody debris) be located? Would Lump Gulch Creek (a water quality limited stream in need of a TMDL) be monitored?

We suggest that additional aquatic/hydrologic monitoring may be needed to detect hydrologic or aquatic habitat or biological effects in impacted drainages. We would like to see clear water quality monitoring goals and objectives identified and described in the FEIS (e.g., what questions are to be answered; what parameters are to be monitored; where and when monitoring will occur; who will be responsible; how the information will be managed and evaluated; and what actions will be taken based on that information).

The monitoring plan should at a minimum include sampling design, methodology, parameters, sampling site locations shown on a map, and frequency or pattern of sampling. The EPA strongly recommends incorporation of a biological component, such as rapid bioassessments using macroinvertebrates, in a monitoring program. Monitoring of the aquatic biological community is desirable since the aquatic community integrates the effects of pollutant stressors over time and, thus, provides a more holistic measure of impacts than grab samples of turbidity and suspended sediment. We encourage you to use the following reference materials in designing and disclosing a monitoring program:

"Monitoring Guidelines to Evaluate Effects of Forestry Activities on Streams in the Pacific Northwest and Alaska", Lee H. McDonald, Alan W. Smart, and Robert C. Wissmar; May 1991; EPA/910/9-91-001.

"Rapid Bioassessment Protocols for Use in Streams and Rivers", James A. Plafkin; May 1989; EPA/444/4-89-001.

Such specific monitoring information should be disclosed in the FEIS to assure that the effects (i.e., physical, chemical and biological effects) of the proposed activities on water quality and the aquatic ecosystem will be determined, and to validate and document BMP effectiveness in protecting water quality, beneficial uses, and Montana Water Quality Standards. This specific information is also needed to provide assurance that instream beneficial uses will be maintained. It would be valuable to document and quantify reduced sediment delivery associated with the proposed Sediment Mitigation Package that is stated to mitigate sediment delivery from proposed roads. The effectiveness of mitigation measures can only be known if monitoring is performed and data collected. Without this information the EIS is inadequate to fully assess the role of monitoring and evaluation in project implementation.

20. It is stated that road closures, year long or during the hunting season, would provide increased levels of wildlife security in the various action alternatives. We note, however, that with

the advent of all terrain vehicles (ATVs) and off-road vehicles (ORVs) it is difficult to effectively restrict motorized access to public lands with simple road closures (i.e., gated closures). An effective policing and enforcement program is needed to assure that motorized access does not occur in restricted areas. The FEIS should describe the Forest Service and BLM inspection and enforcement program that will be used to assure that ATVs and ORVs will not violate motorized vehicle access limitations. It is important that the stated wildlife protection goals be achieved, and these goals can only be achieved if enforcement of road access restrictions occurs.

21. The reference on page III-5 to Figure 3-1 being located on page III-21 is erroneous. Figure 3-1 is located on page III-19.